Climate Change Treaty

In March, the International Climate Change Treaty, which requires ratifying countries to submit detailed information on their greenhouse gas emissions and implement programs to curb such emissions, became legally binding. Under the terms of the United Nations Framework Convention on Climate Change, the treaty became binding 90 days following ratification by the 50th country, which occurred on 21 December 1993 when it was ratified by Denmark, Portugal, Spain, and the European Economic Community. The United States was one of the first countries to ratify the treaty.

Natural Carcinogens

Almost 14 years after the National Academy of Sciences was asked to study what chemicals should be evaluated for their potential carcinogenic risk to humans, the academy is undertaking a new study to determine which naturally occurring carcinogenic substances in food may pose similar risks.

According to Richard Griesemer of NIEHS, which is co-funding the study with EPA, questions about whether naturally occurring carcinogens are potentially as dangerous, or more dangerous, than synthetic chemicals arose in the early 1980s when the original NAS study was done and the National Toxicology Program was in its infancy. Griesemer said he believes these questions are being revisited now because "there's a relative lack of information about carcinogens that occur in nature." Griesemer said NIEHS and EPA asked NAS to do the study because "no one else has an incentive to test the things that occur naturally." The study will be conducted by the NAS's Board on Environmental Studies and Toxicology.

The study will evaluate the information currently available on naturally occurring carcinogens in the human diet and make recommendations on what chemicals should be tested. Many scientists have

charged that the current scientific information available is inadequate to make regulatory decisions. Although an estimated 40% of the more than 450 chemicals that have been tested by the NTP also occur in nature, scientists testing these substances must also consider the use of the chemical, its potential for human exposure, and the degree of bio-



In Memoriam

Frank E. Guthrie, an award-winning entomologist and toxicologist who devoted his over 40-year career to studying the harmful effects of pesticides and other chemicals, died March 29 at the age of 71. Guthrie helped to establish the graduate program in toxicology at North Carolina State University and was responsible for obtaining about \$20 million in research and training grants for the university.

Guthrie received several degrees in entomology including a BA in 1947 and an MA in 1949, both from the

University of Kentucky, and a PhD in 1952 from the University of Illinois. Honors and awards received by Guthrie during his career include the 1984 Society of Toxicology Award, the 1982 Governor's Award for Science, the 1982 Outstanding Research Award of the NCSU Alumni Association, and a North Carolina Award in 1985, the highest honor bestowed by the state. Guthrie also served on the Task Force on Occupational Exposure to Pesticides for the President's Advisory Committee on the Environment.

logical persistence in determining the type of testing that is done. Over the course of NTP testing, according to Griesemer, few substances have been nominated for testing by the Food and Drug Administration, and those that were nominated were mostly drugs.

According to David Sandler, project director for the study, the study committee is still trying to decide what categories of chemicals to include. Said Sandler, "We've been given a big charge. It is a major task to set priorities on what [the committee] wants to focus on. The issue is huge." Scientists say a wide variety of naturally occurring substances may be carcinogenic or have carcinogenic properties, including certain natural pesticides, molds, tannins, spices, fungi, and plant estrogens. Sandler said the study will probably exclude some substances that may be considered part of the diet such as water because it would be too difficult to evaluate the multitude of substances that contaminate it, and pharmaceuticals, which, although ingested, are not consid-

ered food. Some chemicals, such as teas that are used for medicinal purposes, may straddle the line.

Some scientists and EPA sources have speculated that the results of the study could spur major changes in food safety regulations. Sandler was cautious about predicting the outcome of the study. He said that the com-

mittee "wants to try to get its hands around the state of the science in hopes of giving government agencies some ideas on structuring future research." The report is expected to be released in late 1994.

Gore Urges Action

"Just do it," said Vice President Al Gore, quoting a Nike ad in his address to business leaders on the eve of Earth Day. Gore exhorted businesses to sign on to the programs in the administration's Climate Change Action Plan, what he called, "a very aggressive attempt to address the world's most important environmental threat," at a conference at George Washington University.

The conference was attended by more than 600 representatives of businesses, state and local environmental officials, community activists, congressional staff, international delegates, academics, and federal employees.

Gore quoted insurance industry reports predicting dire consequences for businesses as a result of global warming in his call for commitment by industry and others to the plan, which is based on voluntary partnerships between government and industry. Gore also called on government representatives to facilitate implementation of the programs and environmental groups to mobilize public support.

Following Vice President Gore's address, Secretary Hazel O'Leary (DOE), Administrator Carol Browner (EPA), and Deputy Secretary Richard Rominger (USDA) recognized outstanding contributions from current participants in a "Showcasing Partnerships" ceremony.



Toxic smorgasbord? A new study will examine naturally occurring carcinogens in the diet.